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EXAMINER

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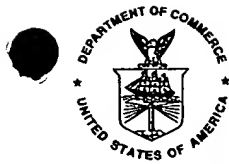
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UNITED STATES DEPARTMENT OF COMMERCE  
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 36

Application Number: 08/719,341  
Filing Date: September 25, 1996  
Appellant(s): Seetharamaiah Mannava et al.

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Steven J. Rosen  
For Appellant

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed August 4, 1999.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

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**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

With regard to the rejections applied against claims 1-20 as being unpatentable over Mannava 5,591,009 in view of Neal and Mallozzi 3,850,698, Appellant's brief includes a statement that claims 1-20 stand or fall together.

With regard to the rejections applied against claims 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, and 18 as being rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 3, 1, 3, 1, 1, 3, 1, 1, 3, 1, 1, and 3, respectively of U.S. Patent No. 5,591,009 in view of Neal and Mallozzi 3,850,698, Appellant's brief includes a statement that claims 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, and 18 stand or fall together.

With regard to the rejections applied against claims 9-10, 14-15, and 19-20 as being rejected under the judicially created doctrine of obviousness-type double patenting as being

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unpatentable over claims 4, 4, 4, 4, 4, and 4, respectively, of US. Patent No. 5,591,009 in view of Neal and Mallozzi 3,850,698, Appellant's brief includes a statement that claims 9-10, 14-15, and 19-20 stand or fall together.

With regard to the rejections applied against claims 1-20 under the judicially created doctrine of double patenting as being unpatentable over claims 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, and 1, respectively, of U.S. Patent No. 5,531,570, since the claims, if allowed, would improperly extends the "right to exclude" already granted in the patent, Appellant's brief includes a statement that claims 1-20 stand or fall together.

**(8) *Claims Appealed***

A substantially correct copy of appealed claims 1-20 appears on pages 17-20 of the Appendix to the appellant's brief. The minor errors are as follows: In claim 17, line 2, -- a -- should be inserted after "having" in order to correct a clerical error. In addition, appellants may wish to consider changing the line spacing from single spacing to double spacing in the Appendix.

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**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,591,009	Mannava et al.	01-1997
5,531,570	Mannava et al.	07-1996
4,426,867	Neal et al.	01-1984
3,850,698	Mallozzi et al.	11-1974

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannava 5,591,009 in view of Neal and Mallozzi 3,850,698. This rejection is set forth in prior Office action, Paper No. 33.

Claims 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, and 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 3, 1, 3, 1, 1, 3, 1, 1, 3, 1, 1, and 3, respectively of U.S. Patent No. 5,591,009

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in view of Neal and Mallozzi 3,850,698. This rejection is set forth in prior Office action, Paper No. 33.

Claims 9-10, 14-15, and 19-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 4, 4, 4, 4, and 4, respectively, of US. Patent No. 5,591,009 in view of Neal and Mallozzi 3,850,698. This rejection is set forth in prior Office action, Paper No. 33.

Claims 1-20 are rejected under the judicially created doctrine of double patenting as being unpatentable over claims 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, and 1, respectively, of U.S. Patent No. 5,531,570, since the claims, if allowed, would improperly extends the "right to exclude" already granted in the patent. This rejection is set forth in prior Office action, Paper No. 33.

The rejection of claims 17-19 under 35 USC 112, second paragraph has been overcome by the Amendment After Final dated August 10, 1998, which has been entered upon filing of the Notice of Appeal and Appeal Brief.

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**(11) *Response to Argument***

With regard to issue 1, appellants have argued that there is a lack of features of the presently claimed invention and a lack of a suggestion in the prior art to make a combination under 35 USC 103. More specifically, appellants have argued that Mannava '009 in claim 1 claims laser shock peened surfaces extending radially along a portion of and chordwise from the leading edge wherein the portion is centered about an intersection of the leading edge and a predetermined nodal line of the blade. This statement of fact is agreed with. Appellants have then argued that the specification and appealed claims of the present application make no mention of the portion centered about an intersection of the leading edge and a predetermined nodal line of the blade. This argument is agreed with, however appealed claim 1, lines 1-11, for example, are commensurate in scope with claim 1, lines 1-12 of Mannava '009, for example. Because appealed claim 1, for example, and claim 1 of Mannava '009, for example, contain conflicting subject matter as evidenced by their overlapping scope as set forth above (with the exception of the component being an airfoil of a compressor, and the specific laser beam power density, which are taught by Neal and Mallozzi), the various rejections under 35 USC 103 and double patenting rejections are proper.

Appellants have also argued that examiner noted that the declaration filed under 37 C.F.R. 1.131(a) appears to be ineffective not because the requisite facts were not shown, but because a declaration is inappropriate under 37 C.F.R. 1.131(a) when the patent is claiming

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the same patentable invention. This argument is not agreed upon because in the advisory action of September 2, 1998, paper number 24, the examiner indicated that the declaration was ineffective because it did not show evidence of facts establishing diligence from just prior to the effective date of the Mannava '009 reference and ending with the date of reduction to practice, and that the declaration was inappropriate under 37 C.F.R. 1.131(a) because the patent is claiming the same patentable invention. This was merely an aid for appellants in the form of an indication as to what the declaration must contain, and the merits of the declaration have not been addressed because the declaration is inappropriate as set forth in MPEP 715 and 715.05. Also note the Interview Summary of September 21, 1998, paper number 25, which stated that even if diligence were established by appellants, the declaration under 37 C.F.R. 1.131(a) is still inappropriate because the Mannava patent '009 claims the same patentable invention.

On page 7, first paragraph of the appeal brief, appellants have argued that the examiner has ignored the differences between the claims on appeal and the claims of Mannava '009. This argument is disagreed with because as set forth above, the appealed claims are commensurate in scope with the claims of Mannava '009.

With regard to the rejection of claims 1-20 under 35 USC 103(a) as being unpatentable over Mannava '009 in view of Neal and Mallozzi 3,850,698, Appellants have argued that the

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examiner has failed to point out any evidence that a fan airfoil is the same or considered to be the same as a compressor airfoil, that appellants have proven that the differences between a compressor blade and a fan blade are substantial, and that no reference teaches that fan and compressor blades are the same. These arguments are disagreed with. Neal (column 1, lines 25-68 and column 2, lines 65-68) provides explicit motivation as to why an artisan skilled in the art would peen an airfoil in a compressor, including the high rotation speeds of the rotor which means that the surface finish can greatly influence the efficiency due to the thin edge and cambered design. Therefore, Neal teaches that the compressor airfoils edges may be peened for producing desired residual stresses at the edge, thereby producing a smooth surface finish. With regard to appellants' argument as set forth on page 7, last paragraph, page 8, the first paragraph on page 9, and page 11, second paragraph of the appeal brief, appellants have argued that Neal clearly teaches away from and warns against using shock peening in a compressor airfoil because Neal states that normal shot peening damages the leading edge and teaches to lessen the blow by directing the shot at an oblique angle to a tangent of the airfoil surface. These arguments are not persuasive because Neal still teaches the desirability of peening compressor airfoils as set forth above. The test for combining references is what the combination of the disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re Simon*, 174 USPQ 114 (CCPA 1972); *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969). The test for obviousness is what the

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combined teachings would have suggested to one of ordinary skill in the art. See, In re Young, 927 F.2d 588, 591, 18 USPQ2d 1989, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). The disclosure of Neal would clearly suggest to one skilled in the art the desirability of peening compressor airfoils.

Appellants have argued on pages 9-10 of the appeal brief that the examiner has utilized improper hindsight reasoning by combining Mannava '009 and Neal and Mallozzi in the rejection of claims 1-20 under 35 USC 103(a). This argument is disagreed with, because it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Both the peening of compressor airfoils, as taught by Neal, and the specific laser beam power density of 100-20 Joules per square centimeter, as taught by Mallozzi, were clearly within the level of ordinary skill in the art at the time the invention was made, and are clearly taught by Neal and Mallozzi.

Appellants have further argued on page 10, second paragraph that the examiner has failed to rebut with evidence the argument made by appellants that fan and compressor airfoils

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are not the same. This argument is strongly, but respectfully disagreed with. It is respectfully submitted that such an equivalence need not be established, because Neal clearly teaches the desirability of peening compressor airfoils, and an artisan skilled in the art would recognize from the teaching of Neal that compressor airfoils may be peened.

Appellants have argued that issue 2, which concerns the rejection of claims 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, and 18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 3, 1, 3, 1, 1, 3, 1, 1, 3, 1, 1, and 3, respectively of U.S. Patent No. 5,591,009 in view of Neal and Mallozzi 3,850,698, and issue 3, which concerns the rejection of claims 9-10, 14-15, and 19-20 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 4, 4, 4, 4, and 4, respectively, of US. Patent No. 5,591,009 in view of Neal and Mallozzi 3,850,698, have similar arguments as pertain to the arguments for issue 1. This statement is agreed with. Appellants have further argued on page 13, second paragraph of the appeal brief that the appealed claims would not be infringed by articles covered in the claims in the Mannava patent '009 and that issuance of appealed claims 1-20 would not be an extension of the patent right beyond the statutory time limit intended by Congress because the claims in Mannava '009 include the limitations of the component being a fan blade and having laser shock peened surfaces extending radially along a portion of and chordwise from the leading edge of an airfoil of the blade wherein the portion is centered about an intersection of the leading edge

and a predetermined nodal line of the blade. These arguments are not agreed with because appealed claim 1, lines 1-11, for example, are commensurate in scope with claim 1, lines 1-12 of Mannava '009, for example. Because appealed claim 1, for example, and claim 1 of Mannava '009, for example, contain conflicting subject matter as evidenced by their overlapping scope as set forth above (with the exception of the component being an airfoil of a compressor, and the specific laser beam power density, which are taught by Neal and Mallozzi), the various rejections under 35 USC 103 and double patenting rejections are proper.

With regard to issue 4, which concerns the rejection of claims 1-20 under the judicially created doctrine of double patenting as being unpatentable over claims 1, and 1, respectively, of U.S. Patent No. 5,531,570, since the claims, if allowed, would improperly extend the “right to exclude” already granted in the patent, appellants have argued that the parent case of the appealed application and U.S. Patent 5,531,570 were filed on the same day. This statement of fact is agreed with. Appellants have also argued that Mannava ‘570 is different from the appealed application in both the claims and specification, in that nothing is mentioned in the instant appealed application regarding counter distortion means and techniques included in the claims of the ‘570 patent. This argument is not persuasive because these features are not recited in the appealed rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26

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USPQ2d 1057 (Fed. Cir. 1993). Although the specification and claims of U.S. Patent 5,531,570 contain counter distortion means and techniques, claims 1-20 of the instant application are broader than the issued claims in the Mannava 5,531,570 patent, and are covered by both the disclosure in the specification as well as the claims of U.S. Patent 5,531,570 and would improperly extend the "right to exclude" already granted in the patent. As noted in the Office action of February 2, 1999, paper number 33, and specifically on page 8, there is no apparent reason why appellants were prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into U.S. patent 5,531,570. See also *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968) and MPEP 804.

Appellants have also argued that according to *In re Berg*, the examiner should have applied a two-way test in the double patenting rejection, as opposed to the one-way test. This argument is not agreed with and it is respectfully submitted that only a one-way test need be applied, and that the one way test was properly applied. As set forth in MPEP 804, the one-way test of obviousness need only be applied when the application at issue compared to the patent are both filed on the same day, and thus only a one-way determination of obviousness is needed in resolving the issue of double patenting. Appellants' argument that a two-way test in the double patenting rejection should have been applied is not agreed with because MPEP 804 indicates that a two way test should only be applied when the patent is the later filed

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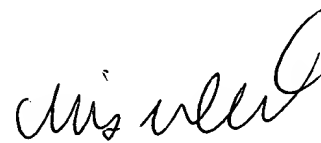
application. The instant application and the patent 5,531,570 were both filed on the same day, therefore only a one-way test need be applied.

With regard to appellants' argument that there is no reason to issue a rejection based on the judicially create doctrine of obviousness double patenting because both the issued patent and any patent that issued from the appealed application will have the same expiration date, this argument is disagreed with for the reasons pertaining to Terminal Disclaimers in GATT Effective Date Cases. Effective June 8 1995, any continuing application of a previously filed application will expire twenty years from the filing date of the earlier filed case. A terminal disclaimer is still required to overcome a nonstatutory double patenting rejection in a continuing application, even though both patents would expire on the same day anyway because of the twenty-year-term provisions under GATT/NAFTA. The reason is that the enforceability/common ownership provision of a terminal disclaimer under 37 CFR 1.321(C)(3) remains. A terminal disclaimer includes a provision that the later filed application which matures into a patent shall only be enforceable as long as the earlier and later filed patents are commonly owned. If and when the patents cease to be commonly owned, the patent containing the terminal disclaimer does not expire, but it becomes unenforceable. This would avoid the problem of an alleged infringer being harassed by two different parties with patents covering the same patentable invention (as defined in 37 CFR 1.601(n)).

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In conclusion, it is respectfully submitted that a *prima facie* case of obviousness has been established. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Christopher Verdier  
Primary Examiner  
Art Unit 3745

C.V.  
October 20, 1999



Edward K. Look  
Appeal Conference Participant



Robert Webster  
Appeal Conference Participant